Montana Comprehensive Assessment System (MontCAS, Phase 2)

Criterion-Referenced Test (CRT)

Common Constructed-Response Item Release
Mathematics, Grade 3

2009

OPI

OFFICE OF PUBLIC INSTRUCTION

For information, contact Measured Progress, P.O. Box 1217, Dover, NH 03821-1217.
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Mathematics

Session 3 (Calculator)

You may use a calculator during this part of the test.

Write out your answer in the box below.

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

_____ inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

c. How many puppets can Fred make using all 4 feet of ribbon?

Scoring Guide

Score	Description
4	4 points
3	3 points
2	2 points
1	1 point
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response.

Scoring Notes

Part a: 1 point — correct answer, **6** or **6 inches**

Part b: 2 points — correct answer, **48** or **48 inches**, with work shown or explanation
OR
1 point — correct answer, **48** or **48 inches**, without work shown or explanation
or
correct strategy with computational error

Part c: 1 point — correct answer, **8**
or
correct answer based on incorrect answer in part a or b

Sample Responses:

Part b: 12 + 12 + 12 + 12 = 48

There are 12 inches in 1 foot, so 48 inches equals 4 feet.

Score Point 4

Sample 1

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

6 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

12, 24, 36, 48.

c. How many puppets can Fred make using all 4 feet of ribbon?

8 inches

Score Point 4

Sample 2

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

6 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

Fred bought forty eight inches of ribbon. I counted twelve four times.

c. How many puppets can Fred make using all 4 feet of ribbon?

Fred can make eight puppets in all because forty eight divided by four equals eight.

Score Point 3

Sample 1

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

6 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

I counted by 12 to 48.

c. How many puppets can Fred make using all 4 feet of ribbon?

He can make 78 puppets

Score Point 3

Sample 2

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

7 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

48 inches 12x4=48

c. How many puppets can Fred make using all 4 feet of ribbon?

6 Puppets with six inches left over

Score Point 3

Sample 3

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

6 inches

Fred bought 4 feet of ribbon to make puppets. 48

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

I just a calcter

c. How many puppets can Fred make using all 4 feet of ribbon? 8

Score Point 2

Sample 1

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

7 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

12
+12
+12
+12
48

c. How many puppets can Fred make using all 4 feet of ribbon?

16

Score Point 2

Sample 2

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

6 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

I got 52in because 12 4 times. then I got 52 in as my answer

c. How many puppets can Fred make using all 4 feet of ribbon?

he can make 4 puppets

Score Point 2

Sample 3

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

7 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

48 inches. I used a calculator and mentel math.

c. How many puppets can Fred make using all 4 feet of ribbon?

8 puppets

Score Point 1

Sample 1

72. Fred needs a piece of ribbon the length shown below to make one puppet.

a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

30 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

120 inches of ribbin.

c. How many puppets can Fred make using all 4 feet of ribbon?

4 Puppets

Score Point 0

Sample 1

72. Fred needs a piece of ribbon the length shown below to make one puppet.

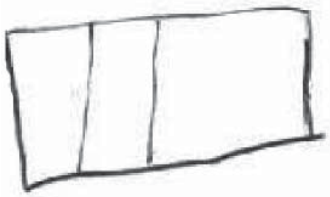
a. Use your ruler to find the length of the piece of ribbon to the nearest inch.

15 inches

Fred bought 4 feet of ribbon to make puppets.

b. How many inches of ribbon did he buy? Show or explain how you found your answer.

he has 4 feet.



c. How many puppets can Fred make using all 4 feet of ribbon?

he has 5 feet.